CLAIMS

1. Use of a sphingosine-1-phosphate (S1P) receptor agonist or a pharmaceutically acceptable salt thereof in the preparation of a medicament for treating progressive dementia or brain degeneration.

2. Use of a sphingosine-1-phosphate receptor agonist or a pharmaceutically acceptable salt thereof in the preparation of a medicament for treating β-amyloid-related inflammatory diseases or disorders.

3. Use of a sphingosine-1-phosphate (S1P) receptor agonist or a pharmaceutically acceptable salt thereof in the preparation of a medicament for reducing or inhibiting loss of cognitive abilities.

4. A pharmaceutical composition for use in treating progressive dementia or brain degeneration, β-amyloid-related inflammatory diseases or disorders or for reducing or inhibiting loss of cognitive abilities comprising a sphingosine-1-phosphate (S1P) receptor agonist or a pharmaceutically acceptable salt thereof together with one or more pharmaceutically acceptable diluents or carriers therefor.

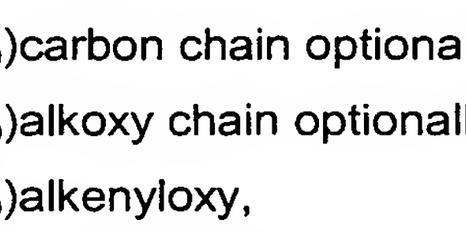
5. A pharmaceutical combination comprising a) a first agent which is a S1P receptor agonist or a pharmaceutically acceptable salt thereof and b) a co-agent useful in the alleviation or treatment of brain degenerative diseases or progressive dementia.

6. A combination according to claim 5, wherein co-agent b) is selected from an AMPA receptor agonist, a noortropic or anti-inflammatory agent or a painkiller.

7. A method for treating progressive dementia or brain degeneration or β-amyloid-related inflammatory diseases or disorders or for reducing or inhibiting loss of cognitive abilities in a subject in need thereof, comprising administering to said subject a therapeutically effective amount of a sphingosine-1-phosphate (S1P) receptor agonist or a pharmaceutically acceptable salt thereof.

8. A method according to claim 7 comprising co-administration, e.g. concomitantly or in sequence, of b) a co-agent useful in the alleviation or treatment of brain degenerative diseases or progressive dementia.

9. A method, composition, combination or use according to any one of the preceding claims, wherein the S1P receptor agonist is compound of formula I



I

wherein R_1 is a straight- or branched (C_{12-22})carbon chain
- which may have in the chain a bond or a hetero atom selected from a double bond, a triple bond, O, S, NR_6, wherein R_6 is H, alkyl, aralkyl, acyl or alkoxycarbonyl, and carbonyl, and/or
- which may have as a substituent alkoxy, alkenyloxy, alkynyloxy, aralkyloxy, acyl, alkylamino, alkylthio, acylamino, alkoxycarbonyl, alkoxycarbonylamino, acyloxy, alkylcarbamoyl, nitro, halogen, amino, hydroxyimino, hydroxy or carboxy; or

R_1 is
- a phenylalkyl wherein alkyl is a straight- or branched (C_{6-20})carbon chain; or
- a phenylalkyl wherein alkyl is a straight- or branched (C_{1-30})carbon chain wherein said phenylalkyl is substituted by
- a straight- or branched (C_{6-20})carbon chain optionally substituted by halogen,
- a straight- or branched (C_{6-20})alkoxy chain optionally substitued by halogen,
- a straight- or branched (C_{6-20})alkenyloxy,
- phenylalkoxy, halophenylalkoxy, phenylalkoxyalkyl, phenoxyalkoxy or phenoxyalkyl,
- cycloalkylalkyl substituted by C_{6-20}alkyl,
- heteroarylalkyl substituted by C_{6-20}alkyl,
- heterocyclic C_{6-20}alkyl or
- heterocyclic alkyl substituted by C_{2-20}alkyl,

and wherein
the alkyl moiety may have
- in the carbon chain, a bond or a heteroatom selected from a double bond, a triple bond, O, S, sulfinyl, sulfonyl, or NR_6, wherein R_6 is as defined above, and
- as a substituent alkoxy, alkenyloxy, alkynyloxy, aralkyloxy, acyl, alkylamino, alkylthio, acylamino, alkoxycarbonyl, alkoxycarbonylamino, acyloxy, alkylcarbamoyl, nitro, halogen, amino, hydroxy or carboxy, and

each of R_2, R_3, R_4 and R_5, independently, is H, C_{1-4} alkyl or acyl
or a pharmaceutically acceptable salt thereof.

10. A method, composition, combination or use according to claim 9, wherein the S1P receptor agonist is 2-amino-2-[2-(4-octylphenyl) ethyl]propane-1,3-diol in free form or in a pharmaceutically acceptable salt form.